

CentralTM
Semiconductor Corp.

DESCRIPTION:

The Central Semiconductor CMPD7006, CMPD7006A, CMPD7006C and CMPD7006S are silicon switching diodes with various diode configurations, manufactured by the epitaxial planar process and packaged in an epoxy molded SOT-23 surface mount case. These devices are designed for applications requiring high voltage switching diodes.

The following configurations are available:

CMPD7006	SINGLE
CMPD7006A	DUAL, COMMON ANODE
CMPD7006C	DUAL, COMMON CATHODE
CMPD7006S	DUAL, IN SERIES

MARKING CODE: C7006
MARKING CODE: C706A
MARKING CODE: C706C
MARKING CODE: C706S

MAXIMUM RATINGS PER DIODE: (T_A=25°C)

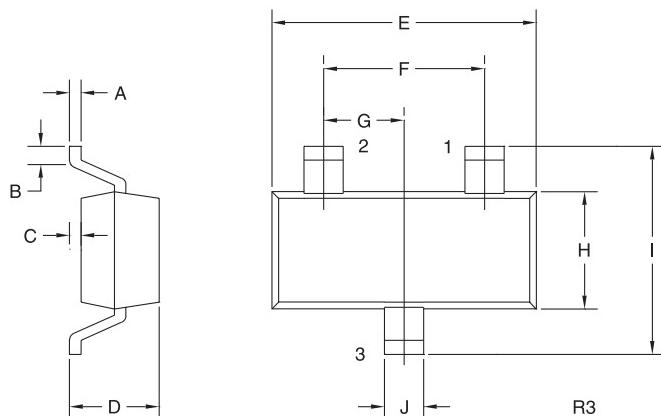
	SYMBOL		UNITS
Continuous Reverse Voltage	V _R	600	V
Peak Repetitive Reverse Voltage	V _{RRM}	600	V
Continous Forward Current	I _F	100	mA
Peak Repetitive Forward Current	I _{FRM}	300	mA
Forward Surge Current, t _p =1.0 μs	I _{FSM}	4.0	A
Forward Surge Current, t _p =1.0 s	I _{FSM}	1.0	A
Power Dissipation	P _D	350	mW
Operating and Storage			
Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	θ _{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS PER DIODE: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _R	V _R =480V		7.0	100	nA
I _R	V _R =480V, T _A =150°C			100	μA
BV _R	I _R =1.0μA	600	675		V
V _F	I _F =10mA		0.88	1.0	V
V _F	I _F =50mA		1.04	1.2	V
V _F	I _F =100mA		1.16	1.4	V
C _T	V _R =0V, f=1.0 MHz			5.0	pF
t _{rr}	I _R =I _F =10mA, R _L =100Ω, Rec. to 1.0mA			500	ns

SURFACE MOUNT
VERY HIGH VOLTAGE
SILICON SWITCHING DIODE

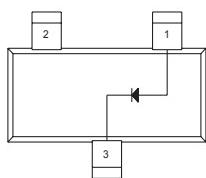
SOT-23 CASE - MECHANICAL OUTLINE



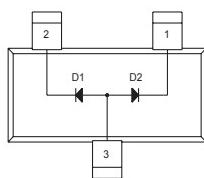
SYMBOL	DIMENSIONS		INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18		
B	0.006	-	0.15	-		
C	-	0.005	-	0.13		
D	0.035	0.043	0.89	1.09		
E	0.110	0.120	2.80	3.05		
F	0.075		1.90			
G	0.037		0.95			
H	0.047	0.055	1.19	1.40		
I	0.083	0.098	2.10	2.49		
J	0.014	0.020	0.35	0.50		

SOT-23 (REV: R3)

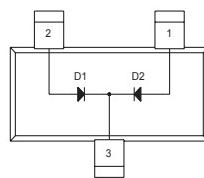
MARKING CODE:
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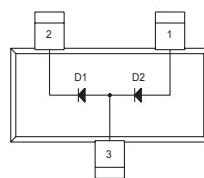
LEAD CODE:
CMPD7006
1) Anode
2) No Connection
3) Cathode



LEAD CODE:
CMPD7006A
1) Cathode D2
2) Cathode D1
3) Anode D1, Anode D2



LEAD CODE:
CMPD7006C
1) Anode D2
2) Anode D1
3) Cathode D1, Cathode D2



LEAD CODE:
CMPD7006S
1) Anode D2
2) Cathode D1
3) Anode D1, Cathode D2